

N47408-99-D-8010  
**MOBILE UTILITIES SUPPORT EQUIPMENT (MUSE)  
CUMMINS KTA-2300-G-GS-CC DIESEL ENGINE OVERHAUL  
STATEMENT OF WORK  
REV DEC 2 98**

**1. SCOPE.** Provide a commercially available overhaul of Cummins Diesel engine(s), model KTA-2300-G-GS-CC. The engine(s) are packaged within 750 kW Mobile Utilities Support Equipment (MUSE) Generating Sets. The depth of overhaul will refurbish each Diesel engine to a zero-time configuration in accordance with complete rebuild specifications using Original Equipment Manufacturer (OEM) new and remanufactured components. Each overhaul shall be performed by OEM KTA-2300 certified service technician(s). This requirement will be executed as an indefinite delivery indefinite quantity type contract for engine overhauls.

**2. BACKGROUND.** Since 1985, the Mobile Utility Support Equipment department has employed 31 (thirty-one) each, 750 kW Generator Sets incorporating the Cummins KTA-2300 Diesel engine. The Government intends to extend the life cycle of each set by having the Diesel engine(s) zero-time overhauled (**including the fuel system**). Each Diesel engine to be overhauled has a high number of engine hours and/or various mechanical problems.

**3. GENERAL.** The Contractor shall transport the complete Generator Set to and from its facility. The Contractor shall remove the Diesel engine from the Generator Set, disassemble the engine, inspect all components, qualify components for reuse, provide to the Government an Inspection Report (including report on reusable components), complete the overhaul and factory test the overhauled engine, and reassemble each Generator Set to its original configuration.

**3.1 ELIGIBLE BIDDERS.** Only OEM factory-certified technicians shall perform each overhaul. See Solicitation Section C-1 "Personnel Qualifications". Offerors must have the facilities to handle, overhaul, and test KTA-2300 Diesel engines.

**3.2 SCHEDULING.** The Government estimates that it will order from 1 (one) to 10 (ten) Diesel engine overhauls per contract year. The Government reserves the right to overhaul fewer than the total inventory of 31 each engines.

**3.3 TRANSPORTATION.** The Contractor is responsible for transporting each Generator Set from the location stated below to its facility and to return it to origin. Generator Set shipping dimensions are: Dry weight: 39,000 lbs., Height: 100", Width: 96", Length: 333". All Generator Sets are skid-mounted. The Government will load each Generator Set onto the Contractor-provided transporter. The Contractor must provide all items required to secure the Generator Set during transportation. Upon return of each Generator Set, the Government will unload the Generator Set from the Contractor-provided transporter.

Location of pickup and return: Seabee Logistics Center  
Code 20  
Building 1360  
Port Hueneme CA 93043

N47408-98-R-3937  
MUSE  
CUMMINS KTA-2300-G-GS-CC DIESEL ENGINE OVERHAUL  
STATEMENT OF WORK  
REV DEC 2 98

**3.4 WARRANTY.** The Cummins OEM warranty for defects in material and workmanship shall be provided with each overhauled Diesel engine. The warranty must entitle the Government to warranty service at any Cummins-authorized repair facility, world-wide. The warranty shall be effective from the date on which each reassembled Generator Set is accepted by the Government.

**4. GENERATOR SET DISASSEMBLY/REASSEMBLY.** The Contractor shall remove all Generator Set structural panels, ancillary components, electrical fixtures, and unbolt the generator to expose engine for removal. All removed components shall be stored for reuse and the Generator Set shall be protected from moisture and dust intrusion. Reassembly shall include generator alignment, installation of ancillary components and electrical fixtures, and assembly of structural panels. New hardware and joint caulking shall be used to assemble structural panels.

## **5. ENGINE OVERHAUL SPECIFICATIONS**

**5.1 ENGINE NOMENCLATURE.** The following engine data pertains to all Cummins model KTA-2300-G-GS-CC Diesel engines supplied for overhaul:

Typical Engine Number: 3310623	Control Parts List (CPL): 0478
Displacement: 2300 cu. in.	Horsepower @ 60Hz: 1235
Timing Code: AJ	Injector Setting: 0.3075
Valve setting (Cold): Intake 0.014 Exhaust: 0.027	
Pump, Fuel Injection Type: AFC; Code E341A	

**5.2 GENERAL.** All work to complete the Cummins KTA-2300 Diesel engine zero-time overhaul shall be performed in accordance with the following Cummins manuals:

Shop Manual: Bulletin 3810304, latest revision

Parts Manual: Bulletin 3810303, latest revision

Price Manual: Bulletin 3379604-30, latest revision

**5.3 DESCRIPTIONS OF “STANDARD OVERHAUL” AND “NON-STANDARD OVERHAUL”.** In this Solicitation, these terms are used to distinguish between overhaul work to be performed under Firm Fixed Price (FFP) terms OR Time and Material (T&M) terms.

The Standard Overhaul shall be performed under FFP terms. The Standard Overhaul includes:

a. Round-trip transportation of complete Generator/engine assembly from NCBC Port Hueneme CA 93043. See paragraph 3.3.

b. Removal and replacement of engine in Generator housing. See paragraph 4.

c. Disassembly of engine. See paragraph 5.4.

d. Component Inspection and Component Qualification. See paragraph 5.5.

e. Preparation of Inspection Report. See paragraph 5.6.

f. Mandatory Parts Replacement. See paragraph 5.7

g. Assembly of engine. See paragraph 5.8.

h. Testing of overhauled engine. See paragraph 5.9.

The Non-Standard Overhaul shall be performed under T&M terms. Non-Standard Overhaul work includes all overhaul work specifically ordered by the Contracting Officer on a Delivery Order or Delivery Order modification, that is not included in the Standard Overhaul. The Contractor shall identify all proposed Non-Standard Overhaul work in the Inspection Report for each engine. The contracting parties shall negotiate T&M amounts for all Non-Standard Overhaul work that the Government requires.

N47408-98-R-3937  
MUSE  
CUMMINS KTA-2300-G-GS-CC DIESEL ENGINE OVERHAUL  
STATEMENT OF WORK  
REV DEC 2 98

**5.4 DISASSEMBLY.** Engine shall be disassembled in accordance with OEM Shop Manual procedures.

**5.5 COMPONENT INSPECTION/QUALIFICATION.** All components shall be qualified for re-use, based on re-use guidelines and tolerances specified in the OEM Shop Manual.

**5.6 INSPECTION REPORT AND GOVERNMENT AUTHORIZATION.** The Contractor shall provide to the Government a written Inspection Report specifying all work and replacement components required to complete the engine overhaul. The Inspection Report shall identify all reusable components. The Contractor shall also provide a price proposal for the overhaul effort, including the Firm Fixed-Price Portion (the Standard Overhaul) and the Time & Material portion (the Non-Standard Overhaul). The Contractor shall not proceed with any overhaul work until a Delivery Order modification has been negotiated and signed by the Contracting parties.

**5.7 MANDATORY PARTS REPLACEMENT.** The following components must be replaced, in all cases:

a. The following components shall be replaced with OEM remanufactured components: Pressure Time (PT) Fuel Pump, Turbochargers, Cylinder Head Assemblies, Water Pump & Drive Assembly, Injectors, Connecting Rods, Lubricating oil pump.

b. The following components shall be replaced with new components identified in OEM Parts Manual: All Bearings, All Cylinder Liners, All Pistons, All Piston Rings, All Coolant Thermostats, All Gaskets, All Seals, All Hoses, All O-Rings, All Filters, All Engine Pressure and Temperature safety devices.

**5.8 ASSEMBLY.** The engine assembly process shall be performed in accordance with OEM Shop Manual procedures and shall meet OEM torque specifications.

**5.9 ENGINE TESTING.** Initial startup and operational testing shall be performed in accordance with OEM Shop Manual. Operational Testing shall include at minimum the engine run-in-period and performance checks at maximum RPM and horsepower range. An Engine Test Report shall be provided with each overhauled engine and shall include all test data from Operational Testing.

**6. PRODUCTION SCHEDULE.** Contractor shall complete each overhaul within 60 days from receipt of Government furnished generating set(s). The workflow time line shall include engine teardown and Inspection Report (including a cost proposal) forwarded to Government within 20 work days from receipt of engine and negotiation of a Delivery Order within 15 work days after submittal of Inspection Report.

(end)